

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/911,676	07/24/2001	Zhimei Jiang	ATT-024PUS	3863	
22494	7590 04/19/2005		EXAM	EXAMINER	
DALY, CRO	WLEY, MOFFORD &	JAIN, F	JAIN, RAJ K		
SUITE 101	KE OTDEET		ART UNIT	PAPER NUMBER	
275 TURNPIKE STREET CANTON, MA 02021-2310			2664		
0.11.1.01.1, 1.1.			2007		

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	<del></del>			
		09/911,676	JIANG ET AL.	.01			
Office Action Summary		Examiner	Art Unit				
		Raj K Jain	2664				
	The MAILING DATE of this communicatio		vith the correspondence addres	S			
Period fo	•						
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR R MAILING DATE OF THIS COMMUNICATI nsions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, period for reply is specified above, the maximum statutory preto reply within the set or extended period for reply will, by reply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a con. The areply within the statutory minimum of the period will apply and will expire SIX (6) MC statute, cause the application to become A	reply be timely filed irty (30) days will be considered timely. INTHS from the mailing date of this commu	nication.			
Status							
1)⊠	Responsive to communication(s) filed on	24 July 2001.	•				
·		This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
4)⊠ 5)□ 6)⊠ 7)□	Claim(s) 1-31 is/are pending in the applicated 4a) Of the above claim(s) is/are with Claim(s) is/are allowed.  Claim(s) 1-31 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction as	hdrawn from consideration.					
Applicati	on Papers		•				
9)[	The specification is objected to by the Exa	miner.					
10)⊠	10)⊠ The drawing(s) filed on <u>10 January 2002</u> is/are: a)⊠ accepted or b) $\Box$ objected to by the Examiner.						
	Applicant may not request that any objection to		•				
11)	Replacement drawing sheet(s) including the control of the control						
Priority (	ınder 35 U.S.C. § 119						
a)(	Acknowledgment is made of a claim for fo  All b) Some * c) None of:  1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International B	ments have been received. ments have been received in priority documents have bee ureau (PCT Rule 17.2(a)).	Application No n received in this National Stac	ge			
Attachmen	t(s) .						
2) Notice	te of References Cited (PTO-892) to of Draftsperson's Patent Drawing Review (PTO-94 mation Disclosure Statement(s) (PTO-1449 or PTO/Ser No(s)/Mail Date 8/13/01.	.8) Paper No	Summary (PTO-413) b(s)/Mail Date Informal Patent Application (PTO-152 	<u>;</u> )			

Art Unit: 2664

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Widegren et al (US006374112B1) in view of Hawkins (US2001/0032254 A1)

Regarding claims 1, and 28, Widegren discloses a method and system for enhancing the online experience of IP network users, (see abstract, Fig 1, by mapping quality control service parameters and using current traffic conditions) the system compromises of:

determining network conditions for data traffic content through the IP network (see col 2 line 49 – col 3 line 5, col 3 lines 44-54, network conditions are determined using a variety of parameters such as QoS and congestion level of a link for transport of data across a circuit switched / packet switched network as appropriate.);

Widegren fails to disclose the use of proxy server for selectively transforming the data traffic content within a network.

Hawkins discloses selectively transforming the data traffic content at a proxy server coupled to a base station based upon the network conditions (see para 0251, 0713, the proxy server may be used to selectively transform a message from one format into another so that it may be compatible and easily accessible to the end user).

Art Unit: 2664

Hawkins provides a seamless coupling of wireless devices that use different protocols and/or content based for interaction with one or more different users for protocol conversions using a proxy server that affords low bandwidth requirements and higher security (see para 0024, 0085).

Therefore it would have been obvious to one of ordinary skill in the arts at the time the invention was made to combine Hawkins proxy server within Widegren so as to allow seamless coupling of wireless devices that use different protocols and/or content based for interaction with one or more different users for protocol conversions using a proxy server that affords low bandwidth requirements and offers higher security.

Further with respect to claim 28, the proxy server 180 (see Fig 1, para 0085) of Hawkins can also reduce the data content by decompressing the information and/or converting the content to size bit depth appropriate for display on the wireless communications device (100).

Regarding claim 2, Widegren discloses determining a level of congestion at a radio link from the base station (see col 3 lines 45-50).

Regarding claim 3, Widegren discloses disproportionate bandwidth allocation based on user requirements (see col 10 line 45).

Claims 4, 5, 7, 16, 17-21 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Widegren et al (US006374112B1) in view of Hawkins (US2001/0032254 A1) and further in view of Duault et al (US005912894A).

Art Unit: 2664

Widegren discloses a radio mobile communications system that affords flexible and efficient allocation of network resources.

Hawkins discloses selectively transforming the data traffic content at a proxy server coupled to a base station based upon the network conditions.

Widegren and Hawkins fail to disclose assignment of multiple threshold levels for different users.

Duault discloses a system for monitoring network traffic to optimize bandwidth usage and allocation against predefined threshold values (see abstract, col 2 line 66 – col 3 line 5, col 6 lines 15-30). Predefining threshold values optimizes the bandwidth effectively as changes to user levels triggers either reassignment of bandwidth or reservation of bandwidth.

Therefore it would have been obvious to one of ordinary skill in the arts at the time the invention was made to incorporate threshold values schemes for users within Widegren thereby effectively optimizing bandwidth usage by reassignment of bandwidth or reservation of bandwidth as appropriate.

Regarding claim 9, Widegren discloses link quality based on data rate and/or packet error performance (see col 3 lines 1-5).

Regarding claims 11-15, 22, 25, 27 and 31 Widegren discloses compression and quality of service parameters such as transfer or control delay, bit rate, frame loss ratio (see col 10 line 22 – col11 line30).

Regarding claims 24, 29, Hawkins discloses (see Fig 1) proxy server 180 proximate the base station 170, furthermore the proxy server 180 proximate with

Art Unit: 2664

another component such as Internet 190. Reasons for combining same as for Claims 1 and 28.

Regarding claim 30, Widegren discloses a GPRS network (see Fig 8 (20)).

Claims 6, 8, 10, 15, and 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Widegren et al (US006374112B1) in view of Hawkins (US2001/0032254 A1) and further in view of Duault et al (US005912894A) and further in view of Aydemir et al (US006771601B1).

Widegren discloses a radio mobile communications system that affords flexible and efficient allocation of network resources.

Hawkins discloses selectively transforming the data traffic content at a proxy server coupled to a base station based upon the network conditions.

Widegren and Hawkins fail to disclose assignment of multiple threshold levels for different users.

Duault discloses a system for monitoring network traffic to optimize bandwidth usage and allocation against predefined threshold values (see abstract, col 2 line 66 – col 3 line 5, col 6 lines 15-30).

Neither of the above references however discloses a network performance based on queuing model.

Aydemir discloses link level congestion control by having sub-queues for its output port queues which correspond to input ports (see Fig 2, abstract, col 7 lines 1-22). Flow control through a network switch having a plurality of input ports and a

Art Unit: 2664

plurality of output ports may be provided by receiving a message for transmission from an input port of the first network switch to an output port of the first network switch and determining if the received message results in an indication of congestion associated with transmitting the received message onto the output port. The sub-queues provide source port level congestion control by providing sub queues of its output queues where each sub-queue corresponds to an input port. Therefore it would have been obvious to one of ordinary skill in the arts at the time the invention was made incorporate sub queues within Widegren so that individual output ports have sub queues to input ports reliving overall link congestion.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj Jain whose telephone number is 571-272-3145.

The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Art Unit: 2664

RJ April 13, 2005